1. A recording head to read from a plurality of tracks on magnetic tape while compensating for shrinkage or expansion of the magnetic tape, the recording head comprising:

a leading module comprising a plurality of leading read elements located at spaced intervals along the length of the leading module;

a trailing module comprising a plurality of trailing read elements located at spaced intervals along the length of the trailing module; and

the trailing module being offset with respect to the leading module, such that:

selected leading read elements are substantially aligned with selected tracks from the plurality of tracks, and

selected trailing read elements are substantially aligned with selected tracks from the plurality of tracks.

2. The recording head of claim 1, wherein the trailing module is fixed with respect to the leading module.

3. The recording head of claim 2, wherein the trailing module is rigidly attached to the trailing module.

4. The recording head of claim 1, wherein the trailing module is substantially identical to the leading module.

5. The recording head of claim 1, further comprising a plurality of leading write elements, on the leading module, and a plurality of trailing write elements, on the trailing module.

6. The recording head of claim 1, further comprising a plurality of servos configured to

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substantially align selected leading and trailing read elements with the plurality of tracks.

7. The recording head of claim 6, wherein the plurality of servos align the selected leading and trailing I/O elements using servo tracks on the magnetic tape.

8. The recording head of claim 6, wherein the servos effectively measure the width of the magnetic tape between servo bands on the tape.

9. The recording head of claim 1, further comprising a controller configured to select the selected leading read elements and the selected trailing read elements.

10. The recording head of claim 1, wherein the leading and trailing modules are offset an amount in the range of between 37% and 77% of the calculated maximum shrinkage and expansion of the magnetic tape.

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11. A method for reading data from a plurality of tracks on magnetic tape while compensating for shrinkage or expansion of the magnetic tape, the method comprising:

providing a leading module comprising a plurality of leading read elements located at spaced intervals along the length of the leading module;

providing a trailing module comprising a plurality of trailing read elements located at spaced intervals along the length of the trailing module;

offsetting the trailing module with respect to the leading module;

aligning selected leading read elements with selected tracks from the plurality of tracks; and

aligning selected trailing read elements with other selected tracks from the plurality of tracks.

12. The method of claim 11, further comprising fixing the trailing module with respect to the leading module.

13. The method of claim 12, further comprising rigidly attaching the trailing module to the leading module.

14. The method of claim 11, wherein the trailing module is substantially identical to the leading module.

15. The method of claim 11, further comprising providing a plurality of leading write elements, on the leading module, and a plurality of trailing write elements, on the trailing module.

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16. The method of claim 11, further comprising:

recording, onto the magnetic tape, an initial width of the tape at the time of recording;

reading, from the magnetic tape, the initial width;

measuring the current width; and

selecting the leading read elements and the trailing read elements in accordance with a variation between the initial width and the current width.

17. The method of claim 11, further comprising substantially aligning selected leading and trailing read elements with the plurality of tracks using a plurality of servos.

18. The method of claim 17, wherein substantially aligning further comprises aligning the selected leading and trailing read elements using servo tracks on the magnetic tape.

19. The method of claim 17, wherein substantially aligning further comprises effectively measuring, with the servos, the width of the magnetic tape between servo bands on the magnetic tape.

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20. A system for reading data from a plurality of tracks on magnetic tape while compensating for shrinkage or expansion of the magnetic tape, the system comprising:

a magnetic medium including a plurality of data tracks located at spaced intervals along the magnetic medium; and

a data storage device including a recording head for reading and writing to and from the data tracks, the recording head comprising:

a leading module comprising a plurality of leading read elements located at spaced intervals along the length of the leading module;

a trailing module comprising a plurality of trailing read elements located at spaced intervals along the length of the trailing module; and

the trailing module, being offset with respect to the leading module such that selected leading read elements and selected trailing read elements effectively align with the data tracks.

21. A recording head to read from a plurality of tracks on magnetic tape while compensating for shrinkage or expansion of the magnetic tape, the recording head comprising:

means for providing a plurality of leading read elements, at spaced intervals, in a substantially linear arrangement;

means for providing a plurality of trailing read elements, at spaced intervals, in a substantially linear arrangement; and

means for offsetting the leading read elements with respect to the trailing read elements.

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22. A method for reading data from a plurality of tracks on magnetic tape while compensating for shrinkage or expansion of the magnetic tape, the method comprising:

providing a plurality of leading read elements spaced substantially linearly with respect to one another and at predetermined intervals;

providing a plurality of trailing read elements spaced substantially linearly with respect to one another and at predetermined intervals, the spacing of the trailing read elements being substantially equal to the spacing of the leading read elements;

offsetting the leading read elements with respect to the trailing read elements;

reading selected tracks from the plurality of tracks with selected leading read elements; and

reading other selected tracks from the plurality of tracks with selected trailing read elements.

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